

**EXPRESS EV438102549LLS**  
**PATENT COOPERATION TREATY**

From the  
 INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

29 DEC 2004

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To:

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 RECEIVED

7.10.

27. Sep. 2004 LC

Patent Department  
 Administration-Hannover

Applicant's or agent's file reference  
 PD020055 ✓

**NOTIFICATION OF TRANSMITTAL OF  
 THE INTERNATIONAL PRELIMINARY  
 EXAMINATION REPORT**

(PCT Rule 71.1)

Date of mailing  
 (day/month/year)

24.09.2004 1 PER VS✓

**IMPORTANT NOTIFICATION**

International application No. PCT/EP 03/06368	International filing date (day/month/year) 17.06.2003	Priority date (day/month/year) 29.06.2002
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Applicant  
 THOMSON LICENSING S.A.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

**4. REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/I/B/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international  
 preliminary examining authority:



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**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PD020055	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/06368	International filing date (day/month/year) 17.06.2003	Priority date (day/month/year) 29.06.2002
International Patent Classification (IPC) or both national classification and IPC H04L12/64		
Applicant THOMSON LICENSING S.A.		

<ol style="list-style-type: none"> <li>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</li>   <li>2. This REPORT consists of a total of 6 sheets, including this cover sheet. <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</li> </ul> <p>These annexes consist of a total of 2 sheets.</p> </li> </ol>
<ol style="list-style-type: none"> <li>3. This report contains indications relating to the following items: <ul style="list-style-type: none"> <li>I    <input checked="" type="checkbox"/> Basis of the opinion</li> <li>II   <input type="checkbox"/> Priority</li> <li>III   <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV   <input type="checkbox"/> Lack of unity of invention</li> <li>V   <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI   <input type="checkbox"/> Certain documents cited</li> <li>VII   <input type="checkbox"/> Certain defects in the international application</li> <li>VIII   <input type="checkbox"/> Certain observations on the international application</li> </ul> </li> </ol>

Date of submission of the demand  22.12.2003	Date of completion of this report  24.09.2004
Name and mailing address of the international preliminary examining authority:   European Patent Office - Gitschner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840	Authorized Officer  Rosken, W Telephone No. +49 30 25901-474



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP 03/06368

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-15 as originally filed

**Claims, Numbers**

1-3 received on 28.06.2004 with letter of 24.06.2004

**Drawings, Sheets**

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

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5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

**see separate sheet**

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-3
	No: Claims	
Inventive step (IS)	Yes: Claims	2,3
	No: Claims	1
Industrial applicability (IA)	Yes: Claims	1-3
	No: Claims	

2. Citations and explanations

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/06368

**Re Item I:**

The amendments filed with the letter dated 24.06.2004 introduce subject-matter which extends beyond the content of the application as originally filed, contrary to Article 34(2)(b) PCT. The amendments concerned are the following:

Claim 1: "a cycle start packet determining minimum start times for [...] asynchronous data transmissions"

Neither the passage of the description indicated by the Applicant in his letter of reply nor the rest of the description as originally filed discloses that the cycle start packet determines minimum start times for asynchronous data transmission. Contrary, figure 4 and the passage of the description indicated by the Applicant (page 10, lines 32 - page 11, line 9) specify that *after the occurrence of a sub-action gap on the bus* (see also figure 5: signal subaction gap) behind the isochronous bus traffic the period of forbidden asynchronous transmission requests and of isochronous data transmission ends.

**Re Item V:**

Since the amendments filed with the letter dated 25.09.2003 introduce subject-matter which extends beyond the content of the application as originally filed, contrary to Article 34(2)(b) PCT, the following examination is carried out as if such amendments had not been made, Rule 70.2(c) PCT.

The following document (D) is referred to in this communication:

D1: US-A-5 687 174

The present application does not meet the requirements of Article 33(1) PCT because the subject-matter of claim 1 does not involve an inventive step, Article 33(3) PCT:

- 1.1 Document D1 discloses a device for a serial communication bus (figure 9) comprising
  - an interface to a physical layer unit (figure 9: interface to physical medium 46) and
  - an interface (figure 9: interface to 10 Base T , E interface, D/Maint interface, B interface) to at least one host processor (figure 2: video camera 48a or computer

48b) supporting the higher layers of the OSI/ISO data communication reference model, the data link layer device further comprises  
- means for checking whether a cycle master capable of transmitting a cycle start packet (table I with column 4, lines 65-67 and column 6, lines 11-12: frame synchronisation pattern byte JK) determining minimum start times for isochronous data transmissions over the network (table I with column 4, lines 65-67 and column 6, lines 6-8: with the frame synchronisation pattern byte JK the earliest or minimum start time for isochronous data transmission B representing 4 bits of data from the isochronous stream after the frame synchronisation pattern byte JK is determined; *remark*: also the minimum start time for asynchronous data transmission E representing 4 bits of data from the asynchronous ethernet stream after the frame synchronisation pattern byte JK is determined by the frame synchronisation pattern byte JK) exists in the network (figure 9: link beat detector 82 with figure 8c, 8e and column 11, lines 12-18: it is known that IEEE 802.9a isochronous ethernet has a cycle master and that the 10Base-T IEEE 802.3 ethernet protocol has no cycle master, the protocol is checked by the detection of the corresponding link test pulses) and if not (column 11, lines 23-28: 10Base-T IEEE 802.3 ethernet protocol is detected) activating configuration means (figure 9: link beat detector 82 outputs mode select signal 516) that enable the generation of asynchronous transmission requests (10Base-T IEEE 802.3 ethernet protocol) without waiting for a cycle start packet and an isochronous data transfer in order to support a no cycle master transfer mode (column 11, lines 23-28: 10Base-T IEEE 802.3 ethernet protocol does not use cycle start packets, does not wait for an isochronous data transfer and has no cycle master).

- 1.2 The subject-matter of claim 1 differs from the known device in that claim 1 specifies the device as a data link layer device. It is, however, obvious to the skilled person to use the device disclosed in D1 as a data link layer device to solve the same problems mentioned in D1 for a data link layer device. Consequently, the subject-matter of claim 1 does not involve an inventive step, Article 33(3) PCT.
- 2.1 Furthermore, claims 1-3 do not contain all the technical features essential to the definition of the invention and do therefore not meet the requirement of Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention:  
Referring to the description on page 4, lines 33 - page 5, line 1 and page 14, lines 29-32, the data link layer device as specified in claims 1-3 is only appropriate "**for bus nodes that does not act as a cycle master**". This feature is therefore

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EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP 03/06368

essential to the definition of the invention of claim 1-3.

- 2.2 The subject-matter of claims 2 and 3 (including the essential features as mentioned above under 2.1) is not disclosed in the closest prior art D1 and is therefore new, Article 33(2) PCT. The problem solved by the subject-matter of claims 2 and 3 may be regarded as how to determine whether a cycle master exists in a network. Regarding the prior art the solution proposed in claims 2 and 3 to solve this problem is considered to be not obvious to the skilled person, the subject-matter of claims 2 and 3 does therefore involve an inventive step, Article 33(3) PCT.